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**USAID AFRICA RISING GHANA**

**ILRI/ CSIR – ARI PROJECT**

**INTENSIFICATION OF INTEGRATED CROP – LIVESTOCK SYSTEMS IN NORTHERN GHANA FOR SUSTAINABLE INCREASE IN SMALLHOLDER FARM PRODUCTIVITY**

**INCEPTION AND PLANNING WORKSHOP REPORT**

**FACILITATED BY**

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**RAPPORTEUR: MISS VALENTINA AISHA SULLEYMAN**

**JUNE, 2012.**

1. **INTRODUCTION**

The overall objective of the Feed the Future Initiative is to improve livelihoods through sustainable increase in productivity of maize-legume and crop/tree/livestock systems in the northern Guinea and Sudan savanna zones of Ghana and Mali. The three northern regions have been said to be the most poverty stricken and hunger spots in Ghana. It is believed that limited integration between crop and livestock production systems has resulted in reduced yields. Therefore, increasing agricultural productivity in these areas will be based on improving crop – livestock integration. With the livestock aspect of the AFRICA RISING project, practical technological and institutional solutions will be adapted at the smallholder farm level to minimize the risk factors and to enable intensification of small scale dairy, small ruminants and rural poultry (guinea fowl) productions in the given farming systems. To this end, best-bet feeding, health and reproductive management practices for guinea fowl and small ruminant production will be pilot tested and out scaled.

1. **PURPOSE OF WORKSHOP / OBJECTIVES**

The purpose of this workshop was to bring together all stakeholders who will partner in this project in order to collate their experiences in past projects and best-bet interventions that have been developed and tested over the years. This will inform the design and implementation of the project R4D activities in 2012.

1. **EXPECTED OUTPUTS**

* A draft of action plans for research on integrated crop – livestock production systems including milk and milk processing, small ruminants, guinea fowl production at the end of workshop
* Formation of teams to facilitate the implementation of the project

1. **WORKSHOP PROCEDURES / APPROACHES**

The workshop was designed to include an opening ceremony session where the participants were welcomed by the Director of the CSIR-Animal Research Institute.

Plenary sessions were used to provide space for resource persons and other relevant stakeholders to make power point presentations for interactive participatory discussions. Group breakouts were used to allow for further discussions of identified topical areas and activity planning. Their outputs were also shared in plenary for validation and adoption. The medium of communication was English.

The workshop lasted for two days from the 11th June to 12th June 2012. Appendix 1 provides the workshop programme.

**4.1** **Multi-institutional Participation**

A total of thirty-one (31) participants made up of four (4) females and twenty-seven(27) males were recorded. There was a multi-institutional representation from government and non-governmental organizations, research institutions, the Universities and Farmer organizations. The list of participants is given in Appendix 2.

**5.0 WORKSHOP OUTPUTS**

**5.1 Twelve (12) technical papers presented**

The titles of the technical papers presented by resource persons are provided in Table 1. The full papers or the power point slides are provided in Appendix 3.

Table 1. Titles of papers and their presenters at Inception and Planning workshop in Tamale

|  |  |
| --- | --- |
| **Title of paper** | **Resource person** |
| Best practices in small ruminant production: some experiences | Mr. Patrick Mbii |
| Research Experiences on crops – livestock integration | Prof Walter S. Alhassan |
| Experiences on The Results and Challenges of Past and Current Livestock Projects Including Milk Processing and The Way Forward | Mr. Lawrence Dartey |
| Experiences on the results and challenges of past and current livestock projects in Upper East Region | Dr.Thomas Anyorikeya |
| WIAD UER Bolgatanga  Presentation on livestock experiences and milk processing | Madam Mary Paula Kogana |
| Experiences with livestock projects and programmes in Upper West | Mr. Saaka |
| Presentation on intensification of integrated crop-livestock systems in Northern Ghana | Mr. Emmanuel Tia Nabila |
| A presentation on experiences of livestock development projects and the way forward in improving productivity and farmers livelihoods | Mr. Foster Baba Awuni |
| Experiences on Livestock Production | Zakaria Abdul Rashid |
| Commercial guinea fowl production for income generation and wealth creation in Northern Ghana (prospects, challenges and the way forward | Thomas Asomburah Adayelei |
| FARMER TRAINING CENTRE:Presentation on the centre’s livestock programmes | Avea Dominic |
| Nutrition Workshop – Background and Objectives | Dr. Asamoah Larbi |

**5.2 EXPERIENCES OF RELEVANT STAKEHOLDERS IN LIVESTOCK VALUE CHAINS SHARED**

Based on the presentations made the various experiences were distilled and provided in Table 2.

Table 2 Summary of experiences shared by various projects and organizations at workshop

|  |  |  |  |
| --- | --- | --- | --- |
| Organisations | Collaborators | Topic / area of presentation | Experiences |
| MoFA Savelugu sheep farm |  | Best practices in small ruminant production: some experiences | Farmers provide inadequate housing structures for livestock and often use small ruminant houses for other purposes.  Improved small ruminants houses built with local materials are being promoted to ensure proper housing of small ruminants.  Small ruminants are usually on free range in search of feed except when crops are grown or town bye - laws are being enforced.  Farmers are being encouraged to practice supplementary feeding to prevent theft and promote proper management practices.  Animals maybe treated with herbs, drugs meant for humans or unconventional chemicals such as engine oil for treating ecto-parasites.  Farmers as well as volunteers are being trained as Community Livestock Workers (CLWs) to assist with treating animals in their communities. |
| MoFA Northern Region | AgDB  RADUs  DADUs | Experiences of Past Livestock Projects - Livestock Development Project (LDP) | Some of the challenges that affected the project was;   * Inability of the project stakeholders to fully operationalize the ONBS in the districts and on the breeding stations. * Inadequate quantum of project to cover more critical areas of development of the livestock industry. * Inadequate professional - technical livestock scientists and extension staff (animal production and veterinary) in the districts. * Unwillingness / inability of livestock farmers to pay for veterinary services |
| Presbyterian Agricultural Services - Garu Station | ACDEP  ARI  MOFA  SARI  Farmers | A presentation on experiences of livestock development projects and the way forward in improving productivity and farmers livelihoods | One of the strategies adopted was the livestock improvement programme. Problems encountered under this programme were high mortality in livestock and poultry; some suspected causes of mortality were poor housing and sanitation, poor feeding and watering and worm infestation.  Interventions such as de – worming, improved housing and sanitation, supplementary and improved feeding and watering, guinea keets mortality trials with farmers with different treatment among others were adopted. |
| UrbANet | ActionAid  MoFA | Experiences on Livestock Production | Strategies adopted to assist livestock farmers were livestock farmers’ mobilisation and networking as well as small ruminants support facility. Under these strategies, small ruminants’ farmer groups and associations were developed and selected farmers were supported with sheep. |
| ACDEP | MoFA  ARI | Lessons learnt from past and present projects | Some lessons learnt over the years are Promoting innovations; promote ethno – veterinary practices that are adoptable and sustainable  Base innovations on best indigenous practices.  Targeting women makes a lot of impact  Employing model farmer strategy produces good results |
| ADDRO |  | Guinea fowl Breeding Pilot Project  Small Ruminant support | Procurement of locally made incubators for hatching of guinea keets for some farmers in the Bawku West District and Bolgatanga Municipality.  Farmers were supplied with keets at 3 weeks old.  Some of the challenges encountered under this project were high guinea keets mortality and locally manufactured incubator required labour to turn eggs manually.  Train farmers in animal husbandry, support farmers with breeding stock, provide cash credit and support with veterinary (vaccination) services.  Challenges encountered here were high mortality of livestock due to diseases. |
| FARA | ILCA  CSIR – ARI  USAID | Research experiences on crop – livestock integration | Demonstration of Stylosanthes hamata in the 1990’s as effective for range improvement when over sown.  Farmers taught silage preparation using Panicum  Dual purpose cowpea and groundnut seed multiplication |

**5.3 DRAFT ACTION PLANS DEVELOPED**

Thematic areas were suggested for implementation. For each of these thematic area, an action plan was developed. The areas of action planning were organized as follows;

**5.3.1 Guinea fowl production**

Major constraints in guinea fowl production include high mortality in guinea keets, feed formulation and incubation and hatching of eggs. As a result, the action plan drafted included the design and implementation of feeding trials, training of farmers, the provision of 8 weeks old keets which will take place both on - farm and on- station.

**5.3.2 Small ruminant production**

A list of possible areas for intervention under small ruminant production was made but two of them were selected to be implemented due to time constraint. The two selected areas were health care and fodder production and strategic supplementation. The action plan proposed productivity enhancing packages including strategic supplementation during the rainy season and disease control (vaccination, deworming and tick control) in community small ruminants, and fodder production providing farmers with planting materials and training of farmers on fodder preparation.

**5.3.3 Milk and milk processing**

Some of the activities suggested for milk and milk processing were collection of baseline information, identification, selection, sensitisation of women groups in milk production and processing, organising a training and demonstration on improved hygienic processing of wagashie for 20 milk processors per district and training and demonstration for 6 processors per district in yoghurt /potaghurt preparation.

**5.3.4 Training course on crop – livestock production for research and extension staff**

Training topics such as soil management systems, livestock systems and crop systems were proposed for 15 participants from selected organisations and institutions to be trained on. The proposed venue is Arewa Sunshine at Gumani during the first week in August. Proposed training methodologies were lectures and strategic field trips.

**5.3.5 Regional workshop**

A planning committee was put in place to organise the diagnostic workshop on crop-livestock systems in Northern Ghana. The main purpose of the workshop is to analyse constraints and opportunities for further sustainable intensification of crop-livestock systems in Northern Ghana with the view to informing future research activities. The workshop was proposed to take place in the Northern region, specifically, Radach memorial centre Tamale. The workshop was proposed to start on the 26th of August, 2012.

**5.4 PROJECT DISTRICTS AND COMMUNITIES SELECTED**

|  |  |  |  |
| --- | --- | --- | --- |
| ACTION PLAN | REGION | DISTRICT | COMMUNITIES |
| Guinea fowl | Northern Region | Tolon - Kumbungu | Tolon and Zugu |
| Upper East Region | Bawku West | Binaba and Tilli |
| Upper West Region | Wa East | Bulenga and Loggu |
| Small ruminants | Northern Region | Tolon - Kumbungu | Zugu |
| Upper East Region | Bawku West | Tilli and Binaba |
| Upper West Region | Wa East | Bulenga and Loggu |
| Milk and milk processing | Northern Region | Savelugu / Nanton | Jana and Duko |
| Upper East Region | Bawku West | Binaba and Yarigu |
| Upper West Region | Wa East | Loggu and Bulenga |

**5.5** **REGIONAL R &D IMPLEMENTATION TEAMS FORMED**

**UPPER EAST**

**MoFA** – Mary Polkuu and Edgar D

**NGO** – ADDRO – Emmanuel Tia Nabila

**Research** – ARI, UDS

**Farmer** – Thomas Adayelei

**NORTHERN REGION**

**MoFA** – Bridget and Patrick

**NGO** – FONG – Jessiwuni

**Research** –ARI, UDS and KNUST

**Farmer** – Basideen

**UPPER WEST**

**MoFA** – Lizzy Kutina and Dr. Saaka

**NGO** - ?

**Research** – ARI, UDS

**Famer** – Sundong

**6.0 CONCLUSION**

In conclusion, drafts of action plans for selected thematic areas have been developed and implementation teams have been formed to facilitate the execution of the action plans.

**7.0 ACKNOWLEDGEMENTS**

CSIR-Animal Research Institute and the organising team offer their profound gratitude to IITA, ILRI and USAID for funding this very important activity. Many thanks to all organisations and institutions who honoured the invitation to attend the workshop

**ABBREVIATIONS**

MC – Master of Ceremonies

WIAD UER – Women in Agriculture Development Upper East Region

MoFA – Ministry of Food and Agriculture

AgDB – Agriculture Development Bank

RADU – Regional Agriculture Development Unit

DADU – District Agriculture Development Unit

ONBS – Open Nucleus Breeding Scheme

ACDEP – Association of Church Development Project

ARI – Animal Research Institute

UrbANet – Urban Agriculture Network

ADDRO – Anglican Diocesan Development and Relief Organization

FARA – Forum for Agricultural Research in Africa

FONG – Farmers’ Organisation Network in Ghana

IITA – International Institute of Tropical Agriculture

ILRI – International Livestock Research Institute

USAID – United States Agency for International Development

**APPENDICES AND ANNEXES**

**Appendix 1 INCEPTION WORKSHOP PROGRAMME**

|  |  |  |
| --- | --- | --- |
| Time | Activity |  |
| Sunday June 10 | Arrival of participants |  |
| Monday June 11 |  |  |
| 7.00-8.00 | Breakfast |  |
| 8.00-9.00 | Registration |  |
| 9.00-10.20 | Session 1 opening ceremony |  |
| Introduction of Chairman |  |
| Chairman’s acceptance and opening remarks | Dogbe/Dei |
| Welcome address | N. Karbo |
| Introduction of participants |  |
| Project background and objectives | A. Larbi |
| Purpose of workshop and expected outputs | Abdou |
|  | Experiences on small ruminant production and the way forward | Patrick Mbii |
| 10.20-10.45 | Improving milk processing and consumption | Prof. Osafo |
| 10.45-11.10 | Experiences on crops – livestock integration | Prof. Alhassan |
| 11.10-11.30 | Group Photo / Snack break |  |
|  | Session 2; Experiences of livestock projects |  |
| 11.30-11.50 | MoFA N R |  |
| 11.50-12.10 | MoFA U E R |  |
| 12.10-12.30 | MoFA U W R |  |
| 12.30-12.50 | ACDEP |  |
| 12.50.13.10 | SNV |  |
| 13.10-14.10 | Lunch |  |
| 14.10-14.30 | ICED |  |
| 14.30-14.50 | ADRO |  |
| 14.50-15.10 | Urbanet |  |
| 15.10-15.30 | Presby Agric Station, Garu |  |
| 15.30-15.50 | Guinea fowl farmers Association |  |
| 15.50-16.10 | Crop-Livestock farmers |  |
|  | Session 1: Developing Project Implementation Plan |  |
| 16.10-17.00 | Project Implementation strategy and timelines | Abdou |
| Tuesday June 12 |  |  |
| 7.00-8.00 AM | Breakfast |  |
|  | Group work; discuss implementation plan |  |
| 8.00-9.30 | Group 1. Test feeding, health and reproductive management strategies to promote Livestock (Small Ruminants and Guinea fowls R&D) value chain through action research |  |
| 8.00-9.30 | Group 2. Build on existing innovation platform to promote ruminant and non ruminant value chain through action research |  |
| 8.00-9.30 | Group 3: Introduce and disseminate best – bet technologies and practices to improve milk processing and consumption |  |
| 8.00-9.30 | Group 4: Organize workshop to review potentials and opportunities for intensification of ruminant and non-ruminants production systems in northern Ghana |  |
| 8.00-9.30 | Group 5: Organize a course on integrated crop-livestock production for research and extension staff |  |
| 9.30-9.50 | Snack break |  |
| 9.50-11.50 | Plenary presentations and sharing of roles to partners for implementation to deliver outputs by September 2012 | Group 1, 2 and 3 |
| 11.50-12.05 | Closing ceremony |  |
| 12.05-13.00 | Lunch and departure |  |

**Appendix 2 INCEPTION WORKSHOP ATTENDANCE LIST**

|  |  |  |  |
| --- | --- | --- | --- |
| **S/NO** | **NAME** | **ORGANISATION** | **CONTACT** |
| 1 | Franklin Avornyo | CSIR-ARI, Nyankpala | 0242179596 |
| 2 | Sulleyman Aisha Valentina | CSIR-ARI, Nyankpala | 0206314142 |
| 3 | Lawrence Dartey | Pong Tamale L.B.S | 0243132341 |
| 4 | Abdulai Mahama | CSIR-ARI, Accra | 0244878392 |
| 5 | C. Y. F. Domozoro | CSIR-ARI, Accra | 0278622727 |
| 6 | Joseph Nchor | ACDEP | 0244068340 |
| 7 | Chris Bakaweri | SNV | 0244141143 |
| 8 | Emmanuel Tia Nabila | ADDRO | 0244969531 |
| 9 | Herbert K Dei | UDS, Tamale | 0247457333 |
| 10 | Serina Sumaila | MOFA-UER- Milk Processor | 0243531364 |
| 11 | Mary Paula Kogana | MOFA-UER | 0244122608 |
| 12 | Mbii Patrick | MOFA-NR | 0243331792 |
| 13 | Thomas Anyorikeya | MOFA-UER | 0243372883 |
| 14 | Issahaku Jesiwuni | FONG | 0543380135 |
| 15 | Zakaria Abdul Rashid | UrbANet | 0244407627 |
| 16 | Thomas A. Adayelei | GUIFFA-BOLGA | 0207556168 |
| 17 | Ismael Sungdong | Farmer-UWR | 0268274603 |
| 18 | N. Karbo | CSIR-ARI, Accra | 0208129300 |
| 19 | Paul N. Polkuu | MOFA-UWR | 0208300349 |
| 20 | Naa Y. O. D. Saaka | MOFA-UWR | 0244973226 |
| 21 | Elizabeth A. Kutina | MOFA-UWR | 0248547721 |
| 22 | E. L. K. Osafo | KNUST-Kumasi | 0242171750 |
| 23 | Avea Dominic | FTC-Bolga | 0242706888 |
| 24 | Wilson Dogbe | CSIR-SARI | 0244603414 |
| 25 | Foster Awuni | PAS-Garu | 0244148846 |
| 26 | Walter S. Alhassan | FARA-Accra | 0208146668 |
| 27 | Issifu Basideen | NR GF Association | 0243906966 |
| 28 | Edgar Drah | MOFA-UER | 0242636988 |
| 29 | Shaibu Mohammed Tiyumtaba | CSIR-ARI, Nyankpala | 0264521199 |
| 30 | Enock Karbo | CSIR-ARI, Nyankpala | 0247576801 |
| 31 | Solomon P Konlan | CSIR-ARI, Nyankpala | 0243330849 |